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January 11, 2008

MHFA
One Beacon Street
Boston, MA 02108-4805

Dear MHFA Retirement Board:

Stone Consulting, Inc. has performed a January 1, 2007 actuarial valuation of the MHFAContributory Retirement System. This valuation and report was prepared using generally accepted actuarial principles and practices and meets the parameters set by the Governmental Accounting Standards Board Statement (GASB) No. 25. To the best of our knowledge, this report is complete and accurate, and the assumptions used represent our best estimate of anticipated experience of the system.

As part of performing the valuation, Stone Consulting, Inc. was furnished member data by the MHFA Retirement System's administrative staff. Although examined for general reasonableness, the data was not audited by the actuary. In addition, the administrative staff furnished financial statements that were not audited by the actuary or by the plan's auditors.

The funding objective of the plan is to fully fund the system while attempting to maintain a stable contribution amount for the upcoming fiscal year or if employer finances allow it, to increase the contribution amount. This funding objective is being met.

We anticipate over time the contribution level to decrease as a percentage of payroll. The contribution rate is determined by adding the normal cost plus an amortization of the unfunded actuarial accrued liability. The normal cost is expected to remain at a level percentage of payroll. The number of years of the amortization and/or the rate of increase of the amortization is adjusted to maintain a stable contribution level for the upcoming fiscal year. The length of the funding schedule is five years with a level amortization. The amortization increase cannot exceed 4.5% annually. The maximum length of the amortization is until Fiscal 2028. These limits are contained in Chapter 32 of the Massachusetts General Laws.

The contribution amount for Fiscal Year 2009 is $1,685,358 that is $703,774 more than the anticipated contribution amount from the prior funding schedule. PERAC and GASB guidelines indicate that actuarial valuations should be conducted at least every other year. The MHFA Retirement Board conducted their previous actuarial valuation effective January 1, 2005. We recommend that a valuation be performed as of January 1, 2009.

We are pleased to present the results of this valuation. If the Retirement Board has any questions on the content of this report, we would be glad to respond.

Respectfully submitted,

STONE CONSULTING, INC.

Actuaries for the Plan

Lawrence B. Stone
Member, American Academy of Actuaries

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INTRODUCTION

This report presents the results of the actuarial valuation of the MHFA Retirement System. The valuation was performed at the request of the Retirement Board as of January 1, 2007 for the purpose of determining the contribution requirements for Fiscal Year 2009 and beyond. The contribution requirements are based on:

- The financial condition of the system as of December 31, 2006
- The benefit provisions of M.G.L. Chapter 32;
- The demographics of members in the system (i.e., active and inactive participants, retirees and beneficiaries as of January 1, 2007);
- Economic assumptions regarding salary increases and investment earnings; and
- Other actuarial assumptions (i.e., terminations, retirement, death, etc.)

JANUARY 1, 2007 VALUATION SUMMARY

	January 1, 2007	January 1, 2005	Change
Contribution Fiscal 2009	$1,685,358	$981,584	$703,774
Funding Schedule Length*	5 years	0 years	5 years
Amortization Increase*	0.00%	0.00%	0.00%
Funding Ratio	94%	92%	+ 3%
Interest Rate Assumption	8.00%	8.00%	0.00%
Salary Increase Rate Assumption	6% grading down to 3.75%	7% grading down to 4.75%	

*Schedule length for January 1, 2005 valuation is the expected length as of Fiscal 2009.

- The Fiscal Year 2009 contribution is $703,774 higher than the planned 2009 contribution. The System experienced a $376,000 net investment loss over the expected market value return since January 1, 2005 (the prior valuation date). Stone Consulting, with agreement from the Retirement Board, values assets using market value.

- The System experienced a 7.7% return on the market value of assets versus our assumption of an 8.00% return. The System's asset portfolio, effective December 31, 2006 was 62% equities and 38% fixed income and short-term investments. The interest rate assumption was maintained at 8.00% to reflect anticipated market performance.

- We have changed the salary increase rate to 6% grading down to 3.75% after 8 years of service to reflect expected experience. Total compensation changed by 12.8% over the prior member data date (three years), however average annual compensation (compensation divided by number of active members) changed by 6.3% or 2.06% per year. The number of active and retired members has increased, along with the age and service of active members. The prior valuation as of January 1, 2005 used member data as of January 1, 2004.

- The funding level of the MHFA Retirement System is 94%, (compared to 92% for the January 1, 2005 actuarial valuation. Chapter 68 requires a minimum funding ratio of 65% along with additional criteria in order to avoid being labeled an "under performing system". If you are considered an "under performing system" the system's assets are required to be transferred to PRIT. The system is likely to remain over the 65% funding ratio level unless the market has a sustained downturn or there are significant changes to benefit provisions. The funding level is estimated to be in the top quartile of Massachusetts' Contributory Retirement Systems.

  The schedule length is five (5) years. The maximum permitted under Chapter 32 of the Massachusetts General Laws is twenty years (2028). The amortization percentage, 0%, stayed the same as the prior valuation, while increasing the FY2009 contribution level. The maximum amortization permitted under Chapter 32 is 4.5%.

- There was an actuarial liability loss which is related to the demographic changes in the membership of the system.

- Changes to non-economic assumptions (withdrawal, disability and retirement) were made since the January 1, 2005 actuarial valuation.

JANUARY 1, 2007 ACTUARIAL VALUATION RESULTS

	January 1, 2007	January 1, 2005	Percentage Change
Funding			
• Contribution for Fiscal 2009	$1,685,358		
• Contribution for Fiscal 2009 based on current schedule		$981,584	72%
Members *			
• ***Actives***			
a. Number	334	315	6.0%
b. Annual Compensation	$25,561,684	$22,669,341	12.8%
c. Average Annual Compensation	$76,532	$71,966	6.3%
d. Average Attained Age	45.8	43.8	4.6%
e. Average Past Service	9.9	8.5	16.5%
• ***Retired, Disabled and Beneficiaries***			
a. Number	87	78	11.5%
b. Total Benefits*	$2,333,404	1,987,701	17.4%
c. Average Benefits*	$26,821	$25,483	5.2%
d. Average Age	67.6	67.1	0.7%
• ***Inactives***			
a. Number	61	54	13.0%
Normal Cost			
a. Total Normal Cost as of January 1, 2007	$2,668,725	$2,663,805	0.2%
b. Less Expected Members' Contributions	2,339,564	2,085,244	12.2%
c. Normal Cost to be funded by the Agency	$329,161	$578,561	-43.1%
d. Adjustment to July 1, 2008	19,946	-	N/A
e. Administrative Expense Assumption	330,666	282,000	17.3%
f. Normal Cost Adjusted to July 1, 2008	$679,773	$860,561	-21.0%

*Prior valuation member data is as of January 1, 2004

SUMMARY OF JANUARY 1, 2007 VALUATION
(Continued)

	January 1, 2007	January 1, 2005	Percentage Change
Actuarial Accrued Liability as of January 1, 2007			
a. Active Members	$43,987,902	$29,049,472	51.4%
b. Inactive Members	1,453,650	2,376,665	-38.8%
c. Retired Members and Beneficiaries	22,448,102	18,329,276	22.5%
d. Total	$67,889,654	$49,755,413	36.4%
Unfunded Actuarial Accrued Liability			
a. Actuarial Accrued Liability as of January 1, 2007	$67,889,654	$54,645,087	24.2%
b. Less Actuarial Value of Assets	64,120,860	50,060,483	28.1%
c. Unfunded Actuarial Accrued Liability	$3,768,794	$4,584,604	-17.8%
d. Adjustment to July 1, 2008	338,064		
e. Unfunded Actuarial Accrued Liability as of July 1, 2008	$4,106,858		

DEMOGRAPHIC INFORMATION

Members	January 1, 2007	Percentage Change
• ***Actives***		
a. Number	334	6.0%
b. Annual Compensation	$25,561,684	12.8%
c. Average Annual Compensation	$76,532	6.3%
d. Average Attained Age	45.8	4.6%
e. Average Past Service	9.9	16.5%
• ***Retired, Disabled and Beneficiaries***		
a. Number	87	11.5%
b. Total Annual Retirement	$2,333,404	17.4%
• ***Inactives***		
a. Number	61	13.0%

- The data was supplied by the MHFA Retirement Board. The data was checked under broad parameters for reasonableness. With the assistance of the staff of the MHFA Retirement Board, we were able to develop a database sufficient for valuation purposes.

- Payroll changed by 12.8% over the course of the past three years. Average annual compensation changed by 6.3% over the same time period.

- The salary increase assumption includes general wage adjustments, step increases, and promotional increases. We have assumed a 6% salary increase for an employee’s initial year of employment grading down to 3.75% after 8 years of service. The salary increase assumption recognizes that employees that have less service are typically paid at lower rates in the salary range and are therefore eligible for step increases. After eight (8) years of service, we assume the majority of employees are at the maximum rate for their position and while eligible for an annual general wage increase are no longer eligible for a step increase.

HISTORY OF ACTIVE PARTICIPANTS

Valuation Year	Number	Average Age	Average Past Service	Average Ann'l Compensation
2007	334	45.8	9.9	$76,532
2005*	315	43.8	8.5	$71,966
2002	312	43.6	7.9	$65,134

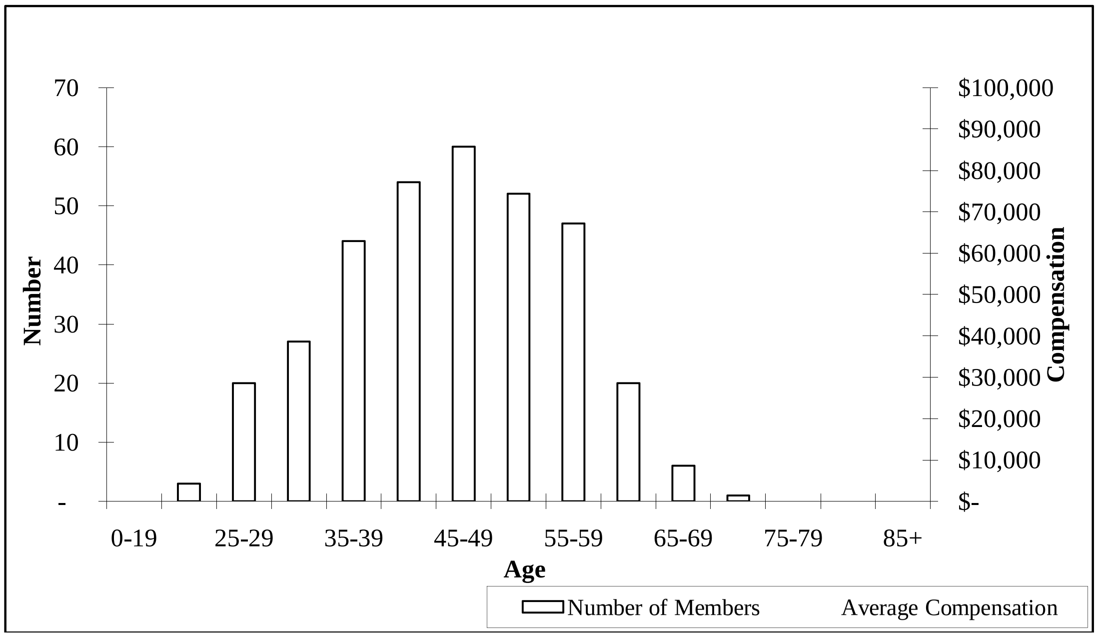
*(EE Data as of 1/1/2004)

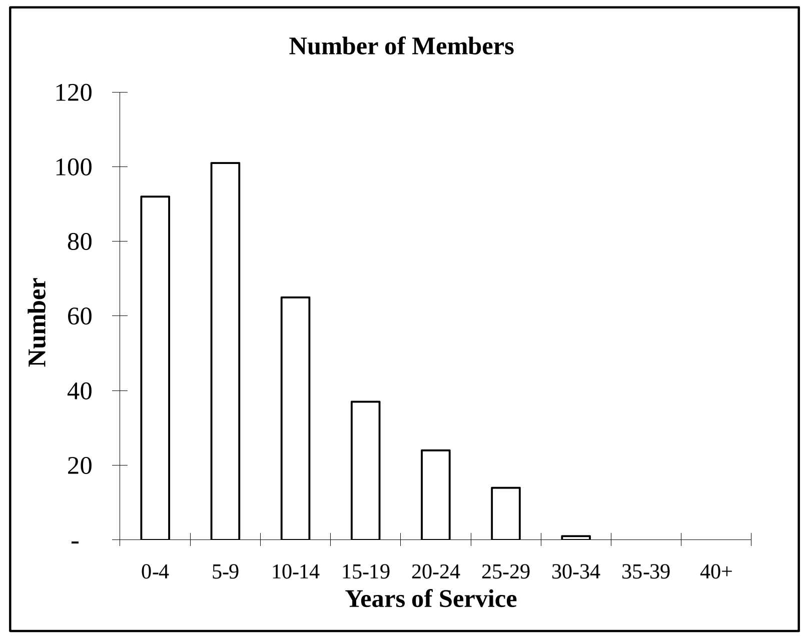
- Employee age and service has increased two years over the course of the past five years. Average annual compensation has grown by 17.5% over the same time period.

The charts on the following pages summarize demographic information regarding active and retiree members.

MASS HOUSING FINANCE AGENCY RETIREMENT SYSTEM
Distribution of Plan Members as of January 1, 2007
Active Members

AGE	0-4 Years	5-9 Years	10-14 Years	15-19 Years	20-24 Years	25-29 Years	30-34 Years	35-39 Years	40 + Years	Total	Total Compensation	Average Compensation
0-19	-	-	-	-	-	-	-	-	-	-	$ -	$ -
20-24	3	-	-	-	-	-	-	-	-	3	115,087	38,362
25-29	19	1	-	-	-	-	-	-	-	20	925,440	46,272
30-34	13	11	3	-	-	-	-	-	-	27	1,685,303	62,419
35-39	17	20	4	3	-	-	-	-	-	44	3,032,093	68,911
40-44	16	16	15	4	3	-	-	-	-	54	4,015,053	74,353
45-49	11	20	13	7	8	1	-	-	-	60	4,822,829	80,380
50-54	6	17	11	6	6	6	-	-	-	52	4,268,031	82,078
55-59	4	10	12	11	5	4	1	-	-	47	4,328,836	92,103
60-64	3	4	6	3	1	3	-	-	-	20	1,815,223	90,761
65-69	-	2	-	3	1	-	-	-	-	6	459,428	76,571
70-74	-	-	1	-	-	-	-	-	-	1	94,359	94,359
75-79	-	-	-	-	-	-	-	-	-	-	-	-
80-84	-	-	-	-	-	-	-	-	-	-	-	-
85+	-	-	-	-	-	-	-	-	-	-	-	-
TOTAL	**92**	**101**	**65**	**37**	**24**	**14**	**1**	**-**	**-**	**334**	**$ 25,561,684**	**$ 76,532**





MASS HOUSING FINANCE AGENCY RETIREMENT SYSTEM
Distribution of Plan Members as of January 1, 2007
Retired Members

Disabled Member

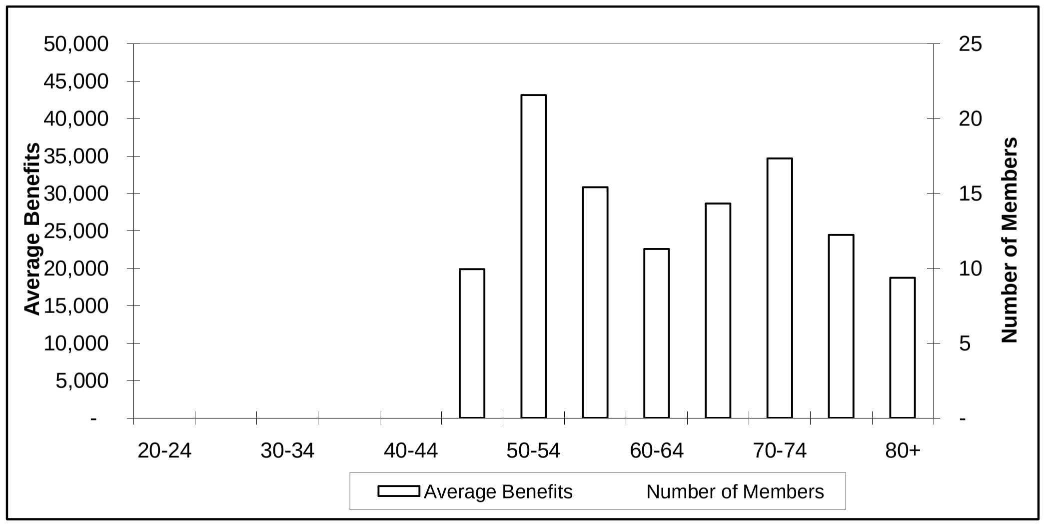
Age	Number	Average Benefit	Total Benefit
20-24	-	-	-
25-29	-	-	-
30-34	-	-	-
35-39	-	-	-
40-44	-	-	-
45-49	-	-	-
50-54	-	-	-
55-59	-	-	-
60-64	-	-	-
65-69	1	30,386	30,386
70-74	1	44,329	44,329
75-79	-	-	-
80+	1	15,929	15,929
TOTAL	**3**	**$ 30,214**	**$ 90,643**

Retired Members and Beneficiaries

Age	Number	Average Benefit	Total Benefit
20-24	-	-	-
25-29	-	-	-
30-34	-	-	-
35-39	-	-	-
40-44	-	-	-
45-49	1	19,884	19,884
50-54	2	43,155	86,309
55-59	10	30,848	308,481
60-64	22	22,603	497,257
65-69	19	28,576	542,949
70-74	11	33,808	371,884
75-79	10	24,450	244,499
80+	9	19,055	171,497
TOTAL	**84**	**$ 30,929**	**$ 2,242,761**

Total

Age	Number	Average Benefit	Total Benefit
20-24	-	-	-
25-29	-	-	-
30-34	-	-	-
35-39	-	-	-
40-44	-	-	-
45-49	1	19,884	19,884
50-54	2	43,155	86,309
55-59	10	30,848	308,481
60-64	22	22,603	497,257
65-69	20	28,667	573,335
70-74	12	34,684	416,213
75-79	10	24,450	244,499
80+	10	18,743	187,426
TOTAL	**87**	**$ 26,821**	**$ 2,333,404**



VALUATION METHODOLOGY

Stone Consulting, Inc. used the Entry Age Normal actuarial funding method in this actuarial valuation. The use of the Entry Age Normal actuarial funding method is consistent with the requirements of Chapter 32 of the Massachusetts General Laws.

NORMAL COST

		January 1, 2007	% of Payroll*
Gross Normal Cost (GNC)	$	2,668,725	10.4%
Employees Contribution		2,339,564	9.2%
Net Normal Cost (NNC)	$	329,161	1.3%
Adjusted to Beginning of Fiscal Year 2009	$	19,946	
Administrative Expense	$	330,666	1.3%
Adjusted Net Normal Cost With Admin. Expense	$	679,773	

*Payroll paid in 2006 for employees as of January 1, 2007 is $25,561,684. Payroll for new hires in 2006 was annualized.

- The gross normal cost (GNC) is the “price” of benefits accruing in the current year if the assumptions underlying the normal cost were realized.

- An individual normal cost represents that part of the cost of a member’s future benefits that are assigned to the current year as if the costs are to remain level as a percentage of the member’s pay. Benefits payable under all circumstances (i.e., retirement, death, disability, and terminations) are included in this calculation.

- Anticipated employee contributions to be made during the year are subtracted from the GNC to determine employer normal cost, or net normal cost (NNC).

- Administrative expenses are added to the NNC. The administrative expense does not include investment manager and custodial fees. These fees are considered part of the interest rate assumption that is net of fees.

ACTUARIAL ACCRUED LIABILITY AND FUNDED STATUS

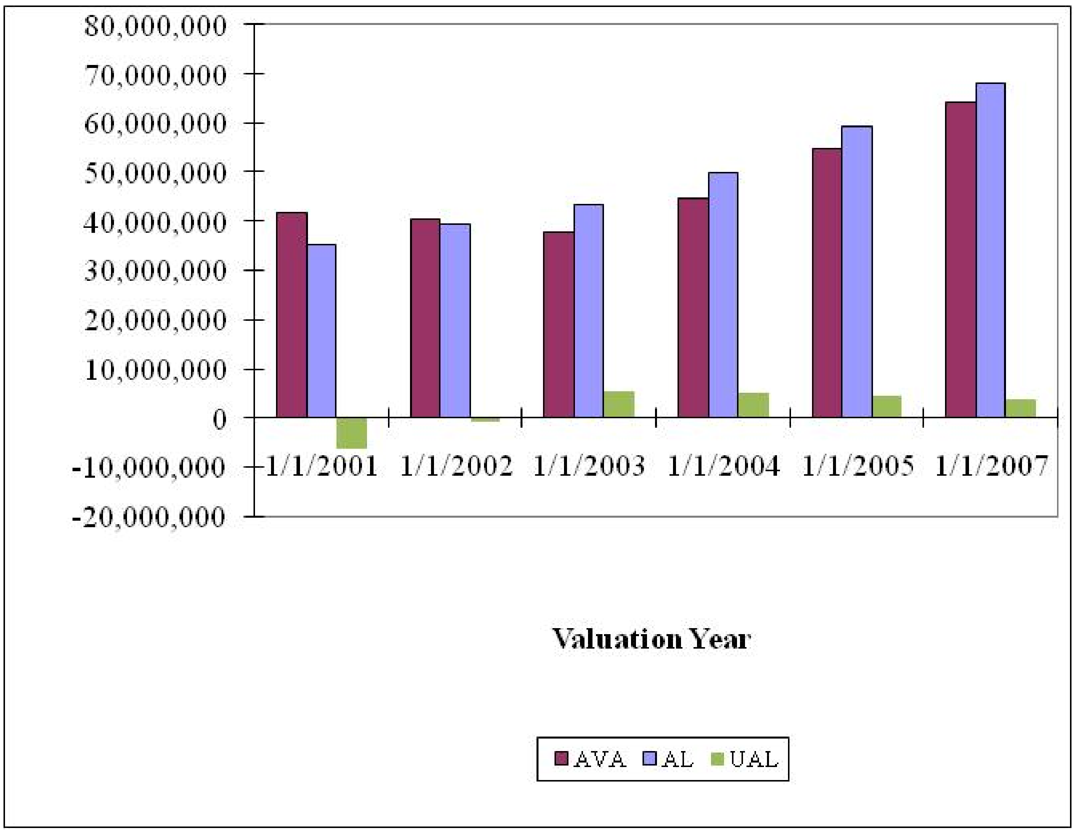
				January 1, 2007	Percentage Change
Active Actuarial Accrued Liability			$	43,987,902	51.4%
Superannuation	$	40,572,840			
Death	$	1,035,385			
Disability	$	729,886			
Termination	$	1,649,791			
Retiree, Inactive, Survivor and Beneficiary Actuarial Accrued Liability				23,901,752	4.7%
Retirees and Beneficiaries	$	21,688,896			
Disabled	$	759,206			
Inactive	$	1,453,650			
Total Actuarial Accrued Liability (AAL)			$	67,889,654	36.4%
Actuarial Value of Assets (AVA)			$	64,120,860	28.1%
Unfunded Actuarial Accrued Liability			$	3,768,794	-17.8%
Funded Ratio (AVA / AAL)					
2007 (8.00% interest rate):		94%			
2005 (8.00% interest rate):		92%			

- Actuarial Accrued Liability (AAL) is the "price" of benefits attributable to benefits earned in past years, or in other words, represents today's value of all benefits earned by active and inactive members.

- The total AAL is $67,889,654. This along with an actuarial value of assets of $64,120,860 produces a funded status of 94%. This compares to a funded status of 92% for the 2005 valuation.

The chart on the following page is a history of the unfunded actuarial accrued liability (UAL) and the valuation assets (AVA) over the course of the past six actuarial valuations.

HISTORY OF ACTUARIAL VALUATION OF ASSETS (AVA), ACTUARIAL ACCRUED LIABILITY (AL) AND UNFUNDED ACTUARIAL ACCRUED LIABILITY (UAL)



DEVELOPMENT OF FUNDING SCHEDULE

Net Employer Normal Cost for Fiscal 2009	$	679,773
Amortization	$	952,397
Total Appropriation	$	1,632,170
Adjustment for December 1 payment date		53,188
Total Appropriation required for Fiscal 2009	$	1,685,358

- The funding schedule is composed of the normal cost, and the amortization of the actuarial accrued unfunded liability, other than the liability associated with the early retirement incentive, and is adjusted by the administrative expense assumption. The contribution is assumed to be made on December 1st of the Fiscal Year.

- The contribution amount for Fiscal 2009 is $1,685,358. The funding schedule is presented on page 14. The schedule's length is five (5) years (for the fresh start base). The maximum funding schedule length allowed by Chapter 32 of the Massachusetts General Laws is twenty years to 2028.

- In developing the funding schedule, we used a fresh start approach in which the unfunded actuarial accrued liability is reamortized instead of maintaining the existing amortization amount and separately amortizing the actuarial gain or loss. The use of a fresh-start approach results in a funding schedule in which the changes in contribution amounts from year to year are more consistent. The amortization percentage stayed the same as the prior valuation, 0.00%. The maximum amortization increase allowed under Chapter 32 is 4.5%.

FUNDING SCHEDULE

Fiscal Year	Normal Cost	Unfunded Liability	Funding Amortization of UAL	Schedule Contribution	Adjusted for December 1 Payments
2009	679,773	4,106,858	952,397	1,632,170	1,685,358
2010	706,964	3,406,818	952,397	1,659,361	1,713,434
2011	735,242	2,650,774	952,397	1,687,640	1,742,635
2012	764,652	1,834,247	952,397	1,717,049	1,773,003
2013	795,238	952,397	952,397	1,747,636	1,804,585
2014	827,048	-	-	827,048	853,999
2015	860,130	-	-	860,130	888,159
2016	894,535	-	-	894,535	923,685

Amortization of Unfunded Liability as of July 1, 2008

Year	Type	Original Amort. Amount	Percentage Increasing	Original # of Years	Current Amort. Amount	Years Remaining
2009	Fresh Start	952,397	0.00%	5	952,397	5

<u>Notes on Amortization of Unfunded Liability</u>

Year is the year the amortization base was established.

Type is the reason for the creation of the base. Examples are Gain/(Loss) or Fresh Start.

Original Amortization Amount is the annual amortization amount when the base was established.

Percentage Increasing is the percentage that the Original Amortization Amount increases per year.

Original # of Years is the number of years over which the base is being amortized.

Current Amortization Amount is the amortization payment amount for this year.

Years Remaining is the number of years left to amortize the base.

ASSUMPTIONS AND METHODOLOGY SUMMARY

The principal actuarial assumptions used in this valuation are the same as the assumptions used in the previous valuation, except where noted, and are summarized in the following table:

Assumption	January 1, 2007 Valuation
Interest Rate	8.00% (same as prior valuation)
Salary Increase	Assumed 6% grading down to 3.75% after 8 years of service. (Prior valuation 7% grading down to 4.75%)
COLA	3% of $12,000
COLA Frequency	Granted every year
Mortality	RP-2000 table. For members retired under an Accidental Disability (job-related), 40% of deaths are assumed to be from the same cause as the disability. Disabled mortality RP-2000 table, ages set forward 5 years.
Overall Disability	75% ordinary disability 25% accidental disability
Retirement Rates	Ages 50 - 70
Administrative Expense	$330,666 budget estimated for FY 2009 provided by MHFA Retirement Board.

ASSETS

a.	Cash	$	2,105,009.44
b.	Fixed Income		17,724,940.45
c.	Equities		10,427,661.50
d.	Pooled Domestic Equity Funds		14,890,855.03
e.	Pooled International Equity Funds		7,841,693.78
f.	Pooled Domestic Fixed Income Funds		4,171,600.46
g.	Pooled Alternative Investments		1,645,803.00
h.	Pooled Real Estate Funds		5,154,352.00
i.	Sub-Total:	$	63,961,915.66
j.	Interest Due and Accrued	$	154,831.92
k.	Accounts Receivable		4,111.94
l.	Accounts Payable		.00
m.	Sub-Total:	$	158,943.86
n.	Market Value of Assets [(i) + (m)]	$	64,120,859.52

- We were furnished with the System's annual report by the Board. The market value of assets as of December 31, 2006 (adjusted for interest due and accrued, payables and receivables) is $64,120,859.52.

- The asset allocation as of December 31, 2006 is approximately 4% cash, receivables, payables and short-term investments, 34% fixed income, and 62% equities.

- Historically, 10 to 11% has been the expected long-term rate of return for equities, and 6 to 7% has been the expected long-term rate of return for fixed income securities. Many economists and investment professionals are projecting lower returns of 6.25 to 10.00% for equities and 3.65 to 6.00% for fixed income securities. In light of these projections, as well as historical investment returns on equities of 10.00-11.00%, the 8.00% interest rate assumption is within the reasonable assumption range. We encourage close monitoring for changes in investment performance against expectations.

DISCLOSURE INFORMATION UNDER GASB STATEMENT 25

Schedules of Funding Progress

(Dollars In Thousands)

Actuarial Valuation Date	Actuarial Value of Assets A	Actuarial Accrued Liability B	Unfunded AAL (UAAL) B-A	Funded Ratio A/B	Covered Payroll C	UAAL as a % of Covered Payroll (B-A)/C
1/1/2007	$64,121	$67,890	$3,769	94%	$25,562	15%
1/1/2005	$50,060	$54,645	$4,585	92%	$23,905	19%
1/1/2004	$44,748	$49,755	$5,007	90%	$22,669	22%
1/1/2003	$37,920	$43,339	$5,418	87%	$21,368	25%
1/1/2002	$40,255	$39,450	$(756)	102%	$21,368	-4%

Notes to Schedules

Additional information as of the latest actuarial valuation follows:

Valuation date	1/1/2007
Actuarial cost method	Entry Age Normal
Amortization method	Approximate level percent of payroll Closed
Remaining amortization period	5 years for the fresh start retirement benefits schedule
Asset valuation method	Market value adjusted by accounts payable and receivables. Market value of assets is $64,120,860.
Actuarial assumptions:	
Investment Rate of Return	8.00% per year
Projected Salary Increases	Assumed 6% per year grading down to 3.75% per year after 8 years of service

PERAC INFORMATION DISCLOSURE

The most recent actuarial valuation of the System was prepared by Stone Consulting, Inc. as of January 1, 2007

The normal cost for employees on that date was:	$2,339,564	9.2% of payroll
The normal cost for the employer was:	$329,161	1.3% of payroll
The actuarial liability for active members was:	$43,987,902	
The actuarial liability for retired members was (includes inactives):	$23,901,752	
Total actuarial accrued liability:	$67,889,654	
System assets as of that date:	64,120,860	
Unfunded actuarial accrued liability:	$3,768,794	
The ratio of system's assets to total actuarial liability was:	94%	
As of that date the total covered employee payroll was:	$25,561,684	

The principal actuarial assumptions used in the valuation are as follows:

Investment Return: 8.00% per annum

Rate of Salary Increase: 6.00% per annum grading down to 3.75% after 8 years of service

SCHEDULE OF FUNDING PROGRESS (Dollars in $000's)

Actuarial Valuation Date	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL) (b)	Unfunded AAL (UAAL) (b-a)	Funded Ratio (a/b)	Covered Payroll (c)	UAAL as a % of Covered Payroll ((b-a)/c)
1/1/2007	$64,121	$67,890	$3,769	94%	$25,562	15%
1/1//2005	$50,060	$54,645	$4,585	92%	$23,905	19%
1/1/2004	$44,748	$49,755	$5,007	90%	$22,669	22%
1/1/2003	$37,920	$43,339	$5,418	87%	$21,368	25%
1/1/2002	$40,255	$39,450	$(756)	102%	$20,322	-4%

ACTUARIAL METHODS AND ASSUMPTIONS

Actuarial Methods

1. Actuarial Cost Method

The Entry Age Normal Actuarial Cost Method has been used in this valuation. Under this method, the normal cost is the amount calculated as the level percentage of compensation necessary to fully fund the prospective benefits from each member's entry age to retirement age.

The actuarial accrued liability represents the theoretical accumulation of all prior years' normal costs for the plan members as if the program had always been in effect. The unfunded actuarial accrued liability is the excess of the actuarial accrued liability over plan assets.

2. Asset Valuation Method

Market value of assets (adjusted by payables and receivables).

3. Fiscal Year Adjustment

The actuarial results are adjusted by the valuation interest rate and salary scale to the beginning of Fiscal Year 2009. The unfunded actuarial accrued liability is rolled forward with normal cost and further adjusted by anticipated contributions and interest.

Actuarial Assumptions

1. Investment Return

8.00% per year net of investment expenses. Same as prior year.

2. Salary Increases

Yrs. Of Svc.	Current Valuation	Prior Valuation
Less than 1	6.00%	7.00%
1	5.50	6.50
2	5.50	6.50
3	5.00	6.00
4	5.00	6.00
5	4.50	5.50
6	4.50	5.50
7	4.00	5.00
8	4.00	5.00
9 or more	3.75	4.75

ACTUARIAL METHODS AND ASSUMPTIONS
(Continued)

3. Withdrawal Prior to Retirement

The rates shown at the following sample ages illustrate the withdrawal assumption. Note that withdrawal assumption is set to zero for years when the retirement rate is nonzero.

	Rate of Withdrawal	
Service	***Current Valuation***	***Prior Valuation***
0	11.25%	15.00%
5	5.70%	7.60%
10	4.05%	5.40%
15	2.48%	3.30%
20	1.50%	2.10%
25	0.75%	1.00%
30	0.00%	0.00%

4. Disability Prior to Retirement

The rates shown at the following sample ages illustrate the assumption regarding the incidence of disability:

	Rate of Disability	
Age	***Current Valuation***	***Prior Valuation***
25	0.02%	0.02%
30	0.02%	0.03%
35	0.04%	0.06%
40	0.08%	0.10%
45	0.11%	0.14%
50	0.14%	0.19%
55	0.18%	0.24%
60	0.21%	0.28%

Disability is assumed to be 75% ordinary and 25% accidental.

ACTUARIAL METHODS AND ASSUMPTIONS
(Continued)

5. Rates of Retirement

The rates shown at the following ages illustrate the assumption regarding the incidence of retirement, once the member has achieved eligibility to retire:

Rates of Retirement

Age	*Current Valuation*		*Prior Valuation*	
	Male	Female	Male	Female
50	1.0%	1.5%	1.0%	1.5%
51	1.0%	1.5%	1.0%	1.5%
52	1.0%	2.0%	1.0%	2.0%
53	1.0%	2.5%	1.0%	2.5%
54	2.0%	2.5%	2.0%	2.5%
55	12.0%	15.5%	2.0%	5.5%
56	12.5%	16.5%	2.5%	6.5%
57	12.5%	16.5%	2.5%	6.5%
58	15.0%	16.5%	5.0%	6.5%
59	16.5%	16.5%	6.5%	6.5%
60	22.0%	15.0%	12.0%	5.0%
61	20.0%	13.0%	20.0%	13.0%
62	30.0%	15.0%	30.0%	15.0%
63	25.0%	12.5%	25.0%	12.5%
64	22.0%	18.0%	22.0%	18.0%
65	40.0%	15.0%	40.0%	15.0%
66	25.0%	20.0%	25.0%	20.0%
67	25.0%	20.0%	25.0%	20.0%
68	30.0%	25.0%	30.0%	25.0%
69	30.0%	20.0%	30.0%	20.0%
70+	100.0%	100.0%	100.0%	100.0%

6. Mortality

The RP-2000 mortality table for healthy annuitants (sex-distinct).

7. Disabled Life Mortality

The RP-2000 mortality table for healthy annuitants (sex-distinct) set-forward by 2 years Death is assumed to be due to the same cause as the disability 40% of the time.

8. Regular Interest Rate Credited to Annuity Savings Account

2% per year. Prior valuation was 5.5% per year.

ACTUARIAL METHODS AND ASSUMPTIONS
(Continued)

9.	Family Composition	Members assumed married with 2 dependent children – one male and one female both age 15; age difference between member and spouse assumed to be 3 years (the male being the older).
10.	Cost-of-Living Increases	A 3% COLA on the first $12,000 of a member's retirement allowance is assumed to be granted every year.
11.	Administrative Expenses	Estimated budgeted amount of $330,666 for the Fiscal Year 2009 excluding investment management fees and custodial fee is added to the Normal Cost.
12.	Step Increases	Step increases are assumed to be part of the salary increase assumption.
13.	Credited Service	Service between date of hire and date of membership is assumed to be purchased by all members.
14.	Contribution Timing	Contributions are assumed to be made effective December 1 of each year.
15.	Valuation Date	January 1, 2007.

SUMMARY OF PRINCIPAL PROVISIONS

1. Participant

Participation is mandatory for all full-time employees whose employment commences before age 65.

2. Member Contributions

Member contributions vary depending upon date hired as follows:

Date of Hire	Member Contribution Rate
Prior to 1975	5% of Pay
1975 – 1983	7% of Pay
1984 – June 30, 1996	8% of Pay
After June 30, 1996	9% of Pay

Members hired after 1978 contribute an additional 2% of pay over $30,000.

3. Pay

a. Pay

Gross regular compensation excluding bonuses, overtime, severance pay, unused sick pay, and other similar compensation.

b. Average Pay

The average of pay during the 3 consecutive years that produce the highest average or, if greater, during the last three years (whether or not consecutive) preceding retirement.

4. Credited Service

Period during which an employee contributes to the retirement system plus certain periods of military service and "purchased" service.

SUMMARY OF PRINCIPAL PROVISIONS
(Continued)

5. Service Retirement

a. Eligibility

Completion of 20 years of credited service or attainment of age 55 and completion of 10 years of credited service. If hired prior to 1978, attainment of age 55.

b. Retirement Allowance

Determined as the product of the member's benefit percentage, average pay and credited service, where the benefit percentage is shown below (maximum allowance of 80% of average pay):

Benefit Percentage	Group 1
2.5%	65+
2.4	64
2.3	63
2.2	62
2.1	61
2.0	60
1.9	59
1.8	58
1.7	57
1.6	56
1.5	55

In addition, veterans receive an additional $15 per year for each year of credited service up to 20 years.

6. Deferred Vested Retirement

a. Eligibility

Completion of 10 years of credited service (for elected and appointed members, 6 years in the event of involuntary termination).

SUMMARY OF PRINCIPAL PROVISIONS
(Continued)

6. Deferred Vested Retirement *(continued)*

b. Retirement Allowance	Determined in the same manner as 5b. with the benefit payable at age 55, unless deferred until later at the member's option. Member contributions with interest may be withdrawn after separation from service. If contributions are withdrawn, eligibility for retirement benefits is forfeited. Members hired before 1984 receive full interest on contributions that are withdrawn; otherwise, one half the credited interest is provided for members who withdraw after 5 but before 10 years of credited service and no interest is provided for withdrawals before 5 years of credited service.

7. Ordinary Disability Retirement

a. Eligibility	Non-job related disability after completion of 10 years of credited service.
b. Retirement Allowance	Determined in the same manner as 5b. with the benefit payable immediately. Veterans receive 50% of pay (during final year) plus an annuity based on accumulated member contributions with interest.

8. Accidental Disability Retirement

a. Eligibility	Disabled as a result of an accident in the performance of duties. No age or service requirement.
b. Retirement Allowance	72% of pay plus an annuity based on accumulated member contributions with interest. Also, a dependent's allowance per year for each child. Total allowance not to exceed 100% of pay (75% for members hired after 1987).

SUMMARY OF PRINCIPAL PROVISIONS
(Continued)

9. Non-Occupational Death

a. Eligibility	Dies while in active service, but not due to occupational injury. 2 years of service.
b. Retirement Allowance	Benefit as if Option C had been elected (see below). Minimum monthly benefits provided as follows: spouse - $250, first child - $120, each additional child - $90.

10. Occupational Death

a. Eligibility	Dies as a result of an occupational injury.
b. Benefit Amount	Same as 8b.

11. Cost-of-Living Increases — An increase of up to 3% applied to the first $12,000 of annual benefit. Percentage increase is voted on each year by the Retirement Board.

12. Optional Forms of Payment

a. Option A	Allowance payable monthly for the life of the member.
b. Option B	Allowance payable monthly for the life of the member with a guarantee of remaining member contributions with interest.
c. Option C	Allowance payable monthly for the life of the member with 66-2/3% continuing to the member's beneficiary upon the member's death. If the beneficiary predeceases the member, the allowance amount "pops up" to the non-reduced amount.

GLOSSARY OF TERMS

1.	Present Value of Benefits	Represents the dollar value today of all benefits expected to be earned by current members if all actuarial assumptions are exactly realized.
2.	Actuarial Cost Method	The procedure that is used to allocate the present value of benefits between the liability that is attributable to past service (Actuarial Accrued Liability) and that attributable to future service.
3.	Actuarial Assumptions	Estimates are made as to the occurrence of certain events that determine the level of benefits to be paid and how long they will be provided. The more important actuarial assumptions include the investment return on assets, salary increases and the rates of turnover, disability, retirement and mortality.
4.	Actuarial Accrued Liability	The portion of the Present Value of Benefits that is attributable to past service.
5.	Normal Cost	The portion of the Present Value of Benefits that is attributable to benefits to be earned in the coming year.
6.	Actuarial Assets	Market value of assets (adjusted by payables and receivables).
7.	Unfunded Actuarial Accrued Liability	That portion of the Actuarial Accrued Liability not covered by System Assets.
8.	PERAC	Public Employee Retirement Administration Commission, a division of the State government which has regulatory authority over the administration of the retirement system.
9.	PRIT	Pension Reserves Investment Trust Fund is the state controlled and administered fund for the investment of assets for members of the retirement system.
10.	GASB	Government Accounting Standards Board (issues guidance for disclosure of retirement system liabilities).